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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,960	06/24/2003	Shigeo Fujita	Q75539	8918
23373	7590	03/13/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			RIELLEY, ELIZABETH A	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding..

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/601,960

Applicant(s)

FUJITA ET AL.

Examiner

Elizabeth A. Rielley

Art Unit

2879

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
Please see attached sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

DETAILED ACTION

Response to Arguments

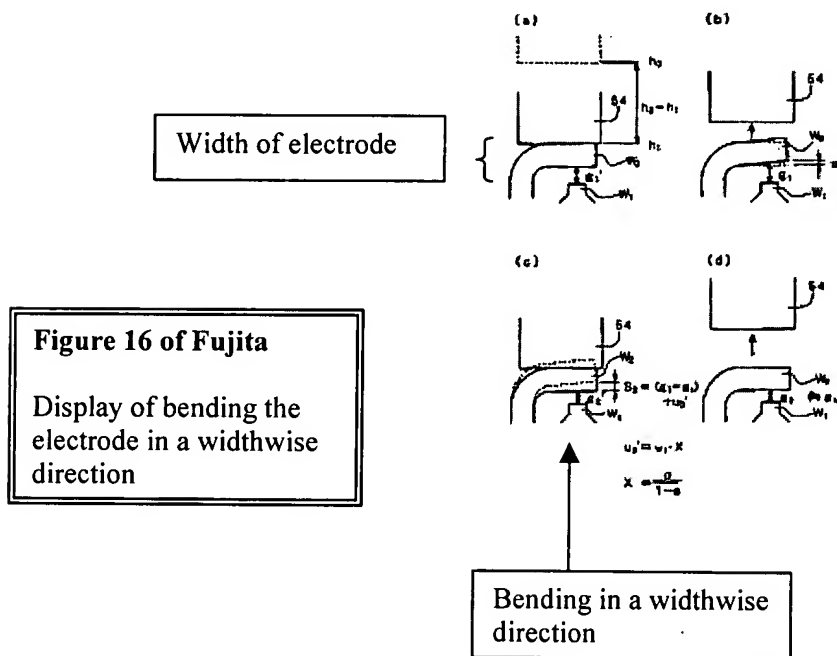
Applicant's arguments filed 2/8/06 have been fully considered but they are not persuasive.

The Examiner thanks the Applicants for the clear and concise explanation of their arguments. For the purpose of clarification, Fujita's (JP 2000-164322) invention will be summarized. Fujita teaches of a method of manufacturing spark plugs that will adjust the ground electrode as little as possible in order to prevent its deterioration (paragraphs 4-9). The method comprises test pressing a pre-bent ground electrode so that the spark gap is at a particular distance; measuring the spring-back of the ground electrode; calculating a final adjustment to the ground electrode incorporating the spring-back measurement so that when adjusted, the ground electrode will use the natural spring-back of the electrode to place itself in the target spacing for the spark plug gap; performing the second and last adjustment that leads to the ideal spark plug gap (paragraphs 4-15, 33; figure 16).

The Applicant argues that Fujita fails to disclose the following steps of manufacturing a spark plug: 1) a provisional pressing of the ground electrode; 2) an adjustment bending in a widthwise direction; 3) a measuring step; 4) another pressing step based on the results of the measuring step. The Examiner, respectfully, disagrees. Fujita in paragraph 33 states a pre-pressed ground electrode is used, which is Applicant's step 1 limitation. A test press is done on the ground electrode in a width wise direction (see below) to determine how far the ground electrode springs or kicks back when released from the pressing device (paragraphs 4-15; see figure 16), Applicant's step 2 limitation. A measurement of the distance the ground electrode moved by the spring back is taken, Applicant's step 3 limitation. This

Art Unit: 2879

measurement, as well as a target gap distance for the spark plug, is used to compute a second and final adjustment to the ground electrode, so that when released from the pressing member, the electrode's natural spring-back will place the electrode at the desired distance from the center electrode, Applicant's step 4.



As shown above, when the ground electrode is bent widthwise following the steps given by Fujita, it naturally decreases the eccentricity of the ground electrode with respect to the target position¹. Also, the Examiner would like to point out that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

¹ <http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861607358> Please see definition 3.

In response to Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which the Applicant relies (i.e., that the provisional pressing and adjustment bending as recited in claim 1 are not preformed in the same direction) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to Applicant's argument that the references fail to give an adequate motivation to combine the method of Fujita with the initial approximation function of Nakatani, the Examiner respectfully disagrees. Nakatani clearly teaches in the abstract of a method to improve the accuracy of automatic adjustments to a spark plug. The Applicant argues that combining Fujita with Nakatani are incompatible due to the following:

- (1) Nakatani uses data from previous spark plugs, while Fujita uses only a single spark plug data;
- (2) Nakatani's data is based on the spark plug gap measurements and Fujita on the spring back measurements of the ground electrode which are incompatible (Amendments filed 8/23/05; page 8);
- (3) Nakatani teaches hammering the electrode more times than Fujita, thereby rendering the electrode deficient, as taught by Fujita.

The Examiner respectfully disagrees.

- (1) Fujita takes into consideration previous spark plug spring back measurements in paragraphs 15-24. (2) These paragraphs, as well as the ones cited previously, also teach that in order to reach the ideal or target spark plug gap measurement, one must take into consideration *both* the spring back of the

Art Unit: 2879

electrode itself as well as how far the pressing member moves the ground electrode. Fujita, however, focuses on teaching in great detail about the spring-back properties of an electrode, while Nakatani teaches how to more accurately measure a spark plug gap. Indeed, these two patents are ideally combined since Fujita teaches a method of accurately determining the spring back of the electrode, and Nakatani teaches a method to accurately measure the gap in order to reach a target spark plug gap. (3) Nakatani also warns the reader about hammering the electrode too much in order to prevent damage done (column 1 line 25 to column 2 line 39).

In conclusion, it is clear that the prior art of record teaches all the limitations in the claimed application.

Conclusion

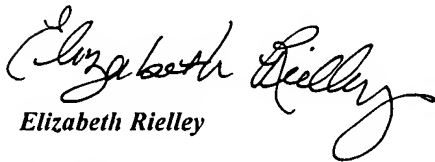
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Rielley whose telephone number is 571-272-2117. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

Art Unit: 2879

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Elizabeth Rielley

Examiner

Art Unit 2879



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